



NOTES

SLEEP & SLEEP-WAKE DISORDERS

GENERALLY, WHAT ARE THEY?

PATHOLOGY & CAUSES

- Mental disorders impacting normal sleep

CAUSES

- Stress, substance use, medical conditions

COMPLICATIONS

- Affects quantity/quality of sleep, causing lack of restorative sleep → irritability, anxiety, depression

SIGNS & SYMPTOMS

- See individual disorders

DIAGNOSIS

- See individual disorders

TREATMENT

- See individual disorders

BRUXISM

osms.it/bruxism

PATHOLOGY & CAUSES

- Repeated teeth grinding/clenching
- Nocturnal (sleep bruxism) or diurnal (awake bruxism)
- Awake variant more associated with stress

CAUSES

- Obstructive sleep apnea, misaligned teeth, stress, dehydration, medication side effects, illicit drugs

COMPLICATIONS

- Can cause temporomandibular joint disorder

SIGNS & SYMPTOMS

- Dental abfraction/attrition → hypersensitivity
- Tooth fractures/loosening/loss
- Tongue biting → crenated/scalloped tongue
- Cheek biting → canker sores
- Sleep bruxism: jaw pain in morning
- Awake bruxism: jaw pain increases throughout day

DIAGNOSIS

OTHER DIAGNOSTICS

- Persistent grinding/clenching of teeth
- Not caused by other condition

VISIT...

LANZAROTE
Caliente.COM



Figure 103.1 Bruxism causes flattening of the occlusal surfaces as seen here.

TREATMENT

MEDICATIONS

- Avoid stimulants, depressants

OTHER INTERVENTIONS

- **Sleep bruxism:** mouth guards, occlusal splints, dental plates, muscle relaxants, oral surgery
- **Awake bruxism:** behavior modification
- Minimize chewing

INSOMNIA

osms.it/insomnia

PATHOLOGY & CAUSES

- Repeated difficulty falling asleep, waking up throughout night, waking up too early
- Affects quantity/quality of sleep, causing lack of restorative sleep
- Individuals often self-medicate with alcohol/benzodiazepines

CAUSES

- Stress, stimulants, depressants, psychiatric/physical conditions (e.g. pulmonary disease)

RISK FACTORS

- Heightened cortisol levels/ sensitivity
- Reduced levels of estrogen/progesterone
- Increases with age

SIGNS & SYMPTOMS

- Excessive time spent falling asleep
- Repeated waking up during night
- Daytime sleepiness, fatigue → irritability, anxiety, depression

DIAGNOSIS

OTHER DIAGNOSTICS

- Poor sleep quantity/quality, associated with
 - Difficulty falling asleep
 - Difficulty maintaining sleep (waking up/ being unable to fall back to sleep)
 - Waking up too early, being unable to fall back to sleep
- Affects day-to-day functioning
- Difficulty with sleep $\geq$ three nights a week for $\geq$ three months
- Must have sufficient opportunity to sleep

TREATMENT

MEDICATIONS

- Melatonin agonists, non-benzodiazepine sedatives, occasionally benzodiazepines

OTHER INTERVENTIONS

- Improve sleep hygiene
 - Regular sleep schedule, exercise; reduce alcohol, caffeine, smoking (esp. in evening); avoid daytime naps and going to sleep hungry
- Stimulus control
 - Use bed only to sleep; remove bright

- lights, minimize noise
- Don't force sleep (try for 20 min, then stop)
- Behavior therapy

NARCOLEPSY

osms.it/narcolepsy

PATHOLOGY & CAUSES

- Recurrent sleep phenomena (e.g. sleepiness/dreaming) during wakefulness
- Associated with a lack of orexin (neuropeptide)
- Orexin (A and B) increases state of wakefulness when binding with postsynaptic neurons
- Individuals fall asleep faster and enter REM faster

CAUSES

- Damage to orexin-transporting neurons
 - By autoimmune process/injury

RISK FACTORS

- Genetic factors, low levels of histamine, infections, autoimmune diseases

SIGNS & SYMPTOMS

- Daytime sleepiness
- Cataplexy (strong emotions cause muscle weakness)
- Hallucinations
 - Hypnagogic: happen when falling asleep
 - Hypnopompic: happen when waking up
- Sleep paralysis
 - Regaining consciousness while body's muscles are paralyzed during sleep

DIAGNOSIS

OTHER DIAGNOSTICS

- Recurrent feelings of sleepiness during daytime > three times/week ≥ three months
- ≥ one of following
 - Cataplexy
 - Hypocretin deficiency
 - Short rapid eye movement (REM) sleep
- Not caused by other condition/substance

TREATMENT

MEDICATIONS

- Selective serotonin reuptake inhibitors (SSRIs), stimulants (e.g. modafinil)

NIGHT TERROR

osms.it/night-terror

PATHOLOGY & CAUSES

- Repeated night/sleep terrors
 - Periods of intense fear occurring at night
- Usually occur during deep non-REM sleep

CAUSES

- Linked to past traumatic events, sleep deprivation

RISK FACTORS

- Most common in children (3–8 years old)

SIGNS & SYMPTOMS

- Night terrors
 - Begins with sharp scream → individual sits up → unresponsive → when awoken, individual confused, has no memory of episode

DIAGNOSIS

OTHER DIAGNOSTICS

- Presence of night terrors
- No recollection of imagery during episode
- Incomplete/absent memory of episode
- Affects day-to-day life
- Not caused by other condition/substance

TREATMENT

OTHER INTERVENTIONS

- Reduce stress, follow nighttime routine
- Often resolves spontaneously (esp. in children)

NOCTURNAL ENURESIS

osms.it/nocturnal-enuresis

PATHOLOGY & CAUSES

- Repeated, uncontrolled passage of urine into bed/clothes, during nighttime
- Often occurs during REM sleep

CAUSES

- Poor bladder control (for physiological developmental reasons)/simply exceeding bladder capacity
- Genetic, environmental
 - Comorbid with other mental disorders
 - More common in biological males

SIGNS & SYMPTOMS

- Repeated, uncontrolled passage of urine into bed/clothes during the nighttime

DIAGNOSIS

OTHER DIAGNOSTICS

- Repeated, uncontrolled passage of urine into bed/clothes during the nighttime
- “Clinically significant”
 - Occurs $\geq$ two times/week for $\geq$ three consecutive months or affects day-to-

day functioning

- $\geq$ five years old
- Not caused by other condition/substance

TREATMENT

- Often resolves spontaneously

MEDICATIONS

- Desmopressin → reduces urine production

PSYCHOTHERAPY

- Behavioral therapy
 - Esp. bedwetting alarm therapy
 - Moisture-detecting alarm wakes individual up during enuresis

OTHER INTERVENTIONS

- Bladder program
 - To build good habits